a pixel unit constituted by a two-dimensional array of pixels for generating charge in correspondence to received light and accumulating the charge for a predetermined period of time;

a vertical transfer unit for vertically transferring
kname the pixels in the pixel unit, a horizontal
transfer unit for horizontally transferring charge from the
vertical transfer unit;

shift gates each provided between each pixel and the vertical transfer unit for reading out the charge in the pixels to the vertical transfer unit, gate electrodes for controlling the shift gates; and

11

12

13

14

18

19

20

21

22

23

24

25

26

27

a plurality of lead lines and a plurality of connection terminals for connecting the gate electrodes to an external circuit,

the gate electrodes making up N of gate electrode groups in which the lines belonging to each coset of modulo N within successive pixel rows are connected to common lead lines, N being a predetermined natural number between 4 and one half the number of pixels in a column, and also being a minimum number corresponding to a periodic unit of gate electrode connections to said connection terminals within said successive pixel rows, the gate electrodes having common connection terminals to reduce the

number of the connection terminals to less than N.

Please replace claim 2 with the following:

- 1 2. (TWICE AMENDED) A solid-state imaging device 2 comprising:
  - a pixel unit constituted by a two dimensional array of pixels for generating charge in correspondence to received